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ABSTRACT

The use of assessment information by school administrators involved in a statewide assessment program was investigated. Data from 93 superintendents were analyzed to determine the relationships between information usage and perceptions of assessment information relevance, problem identification, and origin of superintendent. Local dissemination of assessment results was also examined. Information usage was predicted by superintendent, school, and assessment data variables. Results indicated that perceived relevance of information was related to information usage, but problem identification and origin of superintendent was not, nor was dissemination related to favorableness of results. (Author/RC)

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AN INVESTIGATION OF THE UTILIZATION OF REQUESTED  
ASSESSMENT INFORMATION IN PENNSYLVANIA SCHOOL DISTRICTS

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Pennsylvania Department of Education

Presented at the Annual Meeting of the  
American Educational Research Association

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Assessment Information in Pennsylvania School Districts

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This study investigated the use of assessment information by school administrators involved in a statewide assessment program. Data from 93 superintendents were analyzed to determine the relationships between information usage and perceptions of assessment information relevance, problem identification and origin of superintendent. Local dissemination of assessment results was also examined. Information usage was predicted by superintendent, school and assessment data variables.

Results indicated that perceived relevance of information was related to information usage but problem identification and origin of superintendent was not, nor was dissemination related to favorableness of results. The multiple correlation coefficient was .343.

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Information is perhaps the most important raw material of our age.

Refining this raw material into usable units and applying it in the right places at the right time is a problem that besets most complex organizations. We are reminded often that we are living in times pulsating with knowledge explosions; these explosions should be useful, not destructive. Education is one of the several social institutions which must find the means to use knowledge effectively.

The problem of assimilating pertinent information exists in every organization. Most decisions are based on some kind of information; however, as Goldhammer (1967, p. 39) points out in a national survey of school superintendents, many decisions are made on the basis of fuzzy generalizations rather than on facts. Superintendents feel there is a good deal of educationally relevant data available, but they do not have the time or the personnel who have the expertise needed to review and organize it so that it could be used in making decisions. According to Goldhammer, superintendents expressed a need for more relevant data, carefully gathered and written in a form they could understand. Superintendents criticized past research as too basic and not translatable so as to bear directly on school districts' problems.

Currently, there are many large-scale assessment programs at different stages of development which may produce the data that superintendents indicate they want. Besides the National Assessment of Educational Progress study, many states have developed, or are developing, statewide assessment programs (State Educational Assessment Programs, 1973).

The fact that assessment-type data are being generated as never before makes it imperative that studies be conducted to find how and under what circumstances such data are utilized. Educators today may not have a mandate to change but they do have a mandate to be accountable for their actions. Many states are meeting this accountability mandate through statewide assessment programs. If educators are to derive full benefit from these assessment programs, they must be able to interpret the data gathered and relate it to their own situations.

The educational assessment program in Pennsylvania has evolved from a legislative mandate passed in 1963. The program has many facets and space restrictions prevent their elaboration here (see Burson, 1973). This study dealt with 110 districts assessed in the fall of 1970 at the request of their superintendents. As a result of the assessment, each district received, between May and October of 1971, a hand-carried document for each of their schools where fifth or eleventh graders had been assessed. This document, called a School Report, contained data about the students' achievement in ten areas, data about the students' family background, teacher data and school data. Percentile rankings were provided for every variable based on normative data collected in 1969. Also included were distributions of student scores in the ten achievement areas and a predicted score range for each of these areas. Meetings were held in each district to interpret the results for the superintendent and his invited staff.

#### PURPOSE

The purpose of this study was to ascertain how assessment information was used in local school districts. Specific questions the study was designed to answer were:

1. Are chief school administrators' perceptions of the relevance of the information related to the utilization of the information?
2. Are assessment results utilized more if problem areas are identified?
3. Do chief school administrators, classified as career-bound, utilize the information more extensively than chief school administrators classified as place-bound?
4. How does the favorability of results relate to the dissemination of results?
5. What superintendent (place-bound or career-bound, education), school (enrollment, instructional expenses), and situational (favorableness of report, innovativeness) variables are significant in the prediction of information utilization?

#### DEFINITION OF TERMS

Assessment Information refers to the material in the School Report provided to each superintendent for each school in his district. It contained student scores, predicted scores, condition variable data, student distributions and responses to sample items.

Use of Information refers to the degree of activity reported to be stimulated by the information in the report; activity ranges from none through in-service meetings to implementation of new programs.

Dissemination refers to the transmission of the assessment results to audiences not present when PDE personnel reported the results to the superintendents.

Place-bound and Career-bound refers to superintendent coming to his present position from within the district (place-bound) or from another district (career-bound).

Innovativeness Score refers to the score calculated for each school based on the extent to which they employed relatively new educational practices and averaged to provide a district score.

Favorableness Index refers to position of the obtained student scores relative to the predicted scores and the percentile rank.

Identification of a Problem Area refers to cases where the report called attention to a problem area not previously noted by the school staff.

Perceived Relevance of Information refers to a score calculated for each superintendent based on responses to four Likert-type items about curriculum, personnel, building and financial matters.

It was assumed that use of the assessment information would depend on the superintendent's perception of the information, personal characteristics of the superintendent and characteristics of the local school district. Making use of information often rests on how the recipients view the information given to them: "Is the information important?" "Will the information help in the decision-making process?" Berlo (1960, pp. 51-52) and Thayer (1968, p. 189) have noted the importance of the attitudes of the receivers of information on the subsequent use made of the information. Positive attitudes toward the information should enhance its usage.

The assessment information contained data about students, teachers and the community which was compiled, in many districts, for the first time. This information had the potential of uncovering problem areas not previously observed by the school staff. If problem areas were uncovered, it would be expected that the steps would be taken to correct them.

One part of the assessment report compared a mean student score to a predicted mean score for attitudinal or skill measures. There were ten such measures. Each score was in turn compared to a statewide percentile ranking. Obviously, some schools did better than others, and one might expect that favorable results would be disseminated more widely than unfavorable results. Dissemination of assessment information to inside audiences such as school

boards, teachers and principals would seem to be a natural step to take, while dissemination to outside audiences such as parents and newspapers would be expected to be more restricted, especially if the results were not favorable.

The superintendent played a major role in the assessment process. He was the person who requested his schools be assessed and he was the person who decided how the assessment information would be handled in his district. Carlson (1972) has shown that superintendents with different career orientations differ in the way they perform their role as superintendents. The superintendent was the primary linkage agent; data were gathered concerning his level of education, his salary and his position prior to his current one in order to determine if these variables are associated with usage of the assessment information.

School district enrollment was found to be a significant indicator of innovativeness by Carlson (1965), but he found instructional expenditures per students were not significant. However Ross (1958), in a summary of studies inspired by Mort, found instructional expenses to be the best single indicator of school adaptiveness. Innovativeness implies new procedures, new goals. Innovative schools would be those attempting new practices, schools where routines are changeable. Districts where innovations are accepted as a matter of course would be expected to use the assessment information more than schools where new procedures are viewed more skeptically.

The measure of instructional expenses used in this study includes only those monies spent on instruction such as teacher salaries, books and instructional materials. It does not include expenses for transportation, debt service, administrative salaries or items not related to classroom instruction.

## METHOD

In order to obtain data about the use of the School Reports, their relevance as perceived by superintendents, identification of problem areas and dissemination of the information contained in the reports, a questionnaire was developed. A preliminary version of the questionnaire was submitted to ten district superintendents and nine responded with comments and minor changes were made in certain items.

The item written to secure data about the use of information was designed to parallel the stages in the change process as delineated by Hage and Aiken (1970). The stages in the program change according to Hage and Aiken are evaluation, initiation, implementation and routinization. The question intended to assess the use of information was written, except that the weights were not shown, in the following way:

Which of the following describe the use made of the BEQA information?

Check as many as appropriate.

- 0 a) The information has not been used as yet.
- 1 b) The information has been the subject of some administrative and supervisory meetings.
- 2 c) A new program is being planned for one of our schools as a result of the information.
- 2 d) Revisions of some existing programs are underway as a result of the information.
- 3 e) The information served as a basic for teacher in-service activities.
- 4 f) A new program has been "tried out" in one of our schools as a result of the information.
- 5 g) A new program has been incorporated into one school program as a result of the information.
- 5 h) A new program has been incorporated into several of our schools as a result of the information.

Option "a" was a "face-saving" option because the investigator felt there would be few, if any, superintendents who could not check option "b". Option "b" was designed to tap the evaluation stage of change since administrative and supervisory meetings would be likely forums where evaluative judgments would be made about the School Report information. From such meetings would come decisions relative to what course of action would be pursued. Options "c" and "d" represented the initiation stage. Here planning a new program or revising an existing one indicated a desire to change the status quo. The implementation stage was represented by options "e" and "f". Most changes in school programs involved teachers and teacher in-service activities and would be a necessary first step. The "try-out" was a natural stage between planning and revising and routinization. Finally options "g" and "h" represented the routinization stage. Some districts may have only one school where changes were deemed necessary while other districts could have several schools where changes were made.

The numbers preceding the letters were the weights assigned to each option. Option "f" was accorded a greater weight than "e" since the investigator felt that "try-out" represented more use than in-service activities. The superintendent could check more than one option, but his score was represented by the highest value checked, i.e., if a superintendent checked b, e and g the value assigned would be a five.

For this paper, relevance was put in terms of the decision making process. The item, in its final form, was as follows:

In what way(s) is the information provided in the report relevant to decisions which must be made by you as the superintendent?

Relevant to:	Very Relevant	Quite Relevant	Relevant	Not Relevant
a) curriculum changes	—	—	—	—
b) personnel assignments	—	—	—	—
c) financial allocations	—	—	—	—
d) school plant planning	—	—	—	—
e) other	—	—	—	—
f) not relevant	—	—	—	—

The options here represent categories where major decisions must be made by the superintendent. The assigned weight ranged from a four for "Very Relevant" to a one for "Not Relevant." Scores were summed for options "a", "b", "c" and "d", while option "e" was not scored. If the superintendent felt the Report was not relevant for any of the categories listed he could check option "f" and receive a score of one. Scores on this item could range from one to sixteen.

The information contained in the School Report was quite diverse. It was probable that this information would uncover some problems which had not been previously noted by the superintendent. The following item was included to provide data about identification of problem areas:

Did the information provided call your attention to a problem area not previously noted by you or your staff? Yes \_\_\_\_\_ No \_\_\_\_\_

A yes response received a value of two, a no response received a one.

Dissemination in this study means the transmission of the School Report to audiences not present when the Department of Education personnel gave the School Report to the superintendent. It was expected that results which reflected favorably on the school would be disseminated widely while less favorable results would be shown only to restricted audiences. Two items were used to measure the degree of dissemination:

What persons or groups, in addition to those attending the interpreting session, have seen or heard (formally) the results of the assessment program?

- a) school board
- b) principals
- c) teachers: elementary
- d) teachers: secondary
- e) local service club (Lions, JayCees, etc.)
- f) PTA, PTO, any parent organization
- g) students
- h) other \_\_\_\_\_
- i) none

Have any of the results been published by the local media? Yes \_\_\_\_  
No \_\_\_\_

The dissemination score was incremented by one for each option checked (except if both "c" and "d" were checked only one was added to the score; this procedure was used since some districts had only their elementary schools assessed while others had only their secondary schools assessed. If the superintendent answered "yes" to the media item, the dissemination score was increased by one.

Data for other variables were obtained from the School Reports or Pennsylvania Department of Education records. The source and weighting of the variables is shown in Table 1.

The final version of the questionnaire was mailed in May, 1972, to 101 districts and 93 returned completed questionnaires. These districts constituted about 18 per cent of the districts in Pennsylvania and geographically represented 52 of the 67 counties of the Commonwealth.

Summary statistics were compiled for all variables included in the study. Data were analyzed by employing the Pearson product-moment coefficient of correlation, the uncorrelated t-test and a step-wise multiple linear regression technique. The major questions were tested at the .05 level of significance.

The Pearson product-moment correlation was used to test the significance of the relationships between use of information and relevance of information,

TABLE 1

## SOURCE AND WEIGHTING OF VARIABLES

<u>Variable</u>	<u>Acronym</u>	<u>Source</u>	<u>Weighting</u>
Use of Information	CHANGE	Superintendent Questionnaire:	Responses were weighted as follows: 0 for a 3 for e 1 for b 4 for f 2 for c,d 5 for g,h The highest value marked was assigned for this variable.
Relevance of the Information	RELEV	Superintendent Questionnaire: Item 9	For a, b, c, d: 4 for Very Relevant 3 for Quite Relevant 2 for Relevant 1 for Not Relevant Responses were summed for choices a, b, c and d. If f was marked a value of 1 was given.
Identification of a Problem Area	PROB	Superintendent Questionnaire: Item 10	2 for Yes 1 for No
Favorableness	FAVOR	BEQA Files	1 for an obtained goal score below 25th percentile or below prediction band 2 for an obtained goal score between 25th and 75th percentiles and within prediction band. 3 for an obtained goal score above 75th percentile or above prediction band Scores are averaged by school, then by district.

TABLE 1 - Continued

<u>Variable</u>	<u>Acronym</u>	<u>Source</u>	<u>Weighting</u>
Origin of Superintendent (Conventional)	CONDEF	Superintendent Questionnaire Item 16 and Bureau of Statistics Files	2 if number of years in the unit matched the number of years as superintendent 1 if number of years in the unit was more than number of years as superintendent
Superintendents Educational Level	ED	Bureau of Statistics Files	(All superintendents had at least a Master's degree) 6 = Master's degree 7 = Master's degree plus one year 8 = Master's degree plus two years 9 = Doctor's degree
School District Enrollment	ENROLLD	Bureau of Statistics Files	Total enrollment of the district students, kindergarten through 12th grade.
Instructional Expenses	INSEX	Bureau of Educational Quality Assessment Files	Expenses for instructional purposes only of the district divided by the average daily membership of the district.
District Innovation	INNOVA	Bureau of Educational Quality Assessment Files	Each school reported the extent to which the school employed 12 relatively new educational practices; scores were averaged for the district.
Superintendent's Salary	SALARY	Bureau of Statistics Files	Salary reported for the 1970-71 school year.

use of information and problem areas identified and dissemination of the School Reports and favorableness scores. The uncorrelated t-test was employed to test the significance of differences between place-bound and career-bound superintendents' use of information scores. The step-wise multiple linear regression technique was used to develop a predictive model which had use of information as the criterion variable.

#### Interviews

Seven superintendents were contacted by telephone and were asked if they were willing to be interviewed by the investigator. All agreed and a letter was sent confirming times and dates for the interview.

The purpose of the interviews was to provide more detailed information as to why some districts made significant use of the School Reports while other districts did not use the information. Four of the districts involved in the interviews were selected because they had indicated on the Follow-Questionnaire that a new program had been incorporated into their schools' programs. Three districts which indicated on the Questionnaire they had made little, if any, use of the School Report information were also selected.

The interview sessions were semi-structured and were designed to elicit from the superintendents, and staff members present, feelings about the assessment program, their use of the School Reports, their attitude about innovation and their perceptions about their communities attitudes toward educational change. In districts where new programs had been incorporated, questions were directed to the staff about those programs. The interview sessions were held in October, 1972.

## RESULTS

The utilization of assessment information was directly and significantly associated with the superintendent's perception of the relevance of that information. The Pearson product-moment correlation was .256. This result indicates that the more relevance superintendents' accord assessment information the more likely they are to make use of it. The finding upholds the contention that if persons perceive information as relevant, they are more likely to use it. It was found that superintendents who perceived the school report information as quite or very relevant used the information to a greater extent than superintendents who viewed the information as less relevant to their needs.

Superintendents perceived the information as being most relevant to curriculum changes. By assigning a weight of 4 to Very Relevant, 3 to Quite Relevant, 2 to Relevant and 1 to Not Relevant a total value for each of four areas can be determined. Applying those weights, the curriculum area score would be 314, personnel would total 258, financial allocations 249 and school plant planning 212. Since the results in the School Report focus on student achievement, these perceptions of superintendents appear reasonable.

The information reported back to the superintendents was quite comprehensive; thus, there was a potential for identifying problem areas not previously noted by the school staff. If problem areas were identified, it was expected that the superintendent would report some use of the information. Forty-eight of the ninety-three superintendents reported that problem areas had been identified through the assessment information.

The correlation between identification of a problem area and use of information was .134 which was not significant. This result indicated that superintendents in districts where problems were identified are no more inclined to

use the information than superintendents of districts who reported that no new problems were called to their attention.

That superintendents in districts where problem areas were identified do not use the information more than other superintendents bears out Frymier's (1969, p. 40) contention that there is nothing in the educational system which requires that evaluation data be used. Another element to consider is the type of problem uncovered. It may be that the problems identified have low priority with the school staff or require too much money to resolve.

It was proposed that superintendents having different career orientations would differ in their use of the assessment information contained in the School Reports. Place-bound and career-bound superintendents were very similar in their use of the School Report information; no significant differences among the means were found when an uncorrelated t-test was used with the data shown in Table 2. From these data one must conclude the origin of the superintendent is not related to the use of the School Reports.

TABLE 2  
ORIGIN OF SUPERINTENDENTS AND  
USE OF INFORMATION SCORES

	<u>N</u>	<u>Mean</u>	Standard Error <u>Squared</u>
Place-Bound	52	2.73	0.03
Career-Bound	41	2.59	0.05

$$S = 0.510 \quad df = 40 \quad p = .613$$

One possible explanation for this is the fact that the superintendents, both career-bound and place-bound, requested the assessment be done in their districts. Carlson (1972) reported that while career-bound superintendents adopt innovations sooner than place-bound superintendents, the difference in rates declines over time and drops very sharply after the first few years in office.

Dissemination of the assessment results was defined as the transmission of the results to audiences not attending the meeting where state representatives presented the results to the superintendent. It was expected that greater dissemination would take place if the results reflected favorably on the school district. The correlation coefficient between dissemination and favorableness was computed to be .071, which was not significant.

The results indicated that favorableness of the School Report did not relate to the dissemination of the report. The mean dissemination score, 2.52, indicated the results were made known to between two and three audiences. Since some of the choices possible--school boards, principals, teachers, parents--should be natural recipients of the report information, there appears to be a definite lag in the dissemination of the results of the assessment. It may be that local school district staff do not feel they can present the results adequately no matter how the results might reflect upon them.

#### Predictors of Information Usage

The framework for the prediction of the information usage assumed that usage depends on superintendent characteristics, school district characteristics and perceptions of the school report.

Multiple regression analysis was employed in order to establish the percent of variance explained by each predictor variable. Multiple regression

analysis takes into account the intercorrelations among the predictor variables and selects the combination of predictor variables which account for the greatest amount of variation in the dependent variable. It was necessary, therefore, to calculate the zero-order correlations for all variables employed in the prediction process.

The zero-order correlations shown in Table 3 served as the input for the regression analysis. Predictor variables were allowed to enter the regression equation as long as they contributed at least one percent to the explained variance. Table 4 shows the variables which entered the prediction equations.

Under the criterion employed, it may be observed that only four variables contributed at least 1 percent to the explained variance. The multiple correlation of .343 was significant at the .05 level; however, only 11.8 percent of the variance in the use of information variables was explained by these variables. There was at least one variable from each part of the hypothesized framework; relevance and problem area from perceptions of the school report, enrollment from school district characteristics, and salary from superintendent characteristics. Examination of the zero-order correlation matrix reveals that only relevance of information is significantly correlated with the use of information, thus, the regression results could have been anticipated. One must conclude that the prediction of information usage as measured in this paper remains indeterminate.

#### Summary of Interview Sessions

Interviews were conducted in seven districts. Four of these districts had reported substantial changes (change districts) due to the assessment and three districts had indicated, on the follow-up questionnaire, that very little use had been made of the data (no-change districts).

TABLE 3

ZERO-ORDER CORRELATION MATRIX FOR USE OF INFORMATION  
AND NINE PREDICTOR VARIABLES

(N = 93)

	<u>CHANGE</u>	<u>CONDEF</u>	<u>INNOVA</u>	<u>SALARY</u>	<u>ED</u>	<u>FAVOR</u>	<u>PROB</u>	<u>RELEV</u>	<u>ENROLLD</u>
CONDEF	-.054								
INNOVA	.022	.087							
SALARY	.020	.228	.251						
ED	-.025	.144	.076	.423					
FAVOR	-.066	.110	.178	.327	.128				
PROB	.134	-.154	.118	.050	-.175	-.079			
RELEV	.256*	-.067	.076	.070	.064	-.057	.184		
ENROLLD	-.085	.091	.277	.709	.297	.177	-.025	-.152	
INSEX	.035	-.051	.269	.422	.392	.069	.220	.154	.376

\*Coefficient required for significance at the .05 level is .205.

TABLE 4  
RESULTS OF REGRESSION ANALYSIS

<u>Order of Entry In Regression Analysis</u>	<u>Variable</u>	<u>R</u>	<u>Cumulative Percent of Explained Variance (<math>R^2</math>)</u>
1.	RELEV	.255	.065
2.	ENROLLD	.284	.081
3.	SALARY	.331	.109
4.	PROB	.343	.117

The interviews confirm what was reported on the questionnaires with one exception. One of the no-change districts maintained in the interview that assessment results were used to assist them in revising their social studies curriculum and in developing a guidance handbook.

In a letter requesting an interview session the investigator asked to meet with those persons in the district who had worked with the report. In each of the change districts, there were always district personnel other than the district superintendent in attendance. Usually those other personnel responded more often to the questions than did the superintendent. It was apparent that the superintendent had delegated responsibility to these people. The superintendent had encouraged the use of the results and his staff had the ability to relate the results to district needs.

In each of the four change districts there was a felt-need for change; they were searching for ways to change particular situations. One district was trying to emphasize the affective area of education and, since seven of the ten student output measures are attitude and interest measures, the assessment results provided the means for introducing the desired changes. A second had

established a "Social Lab" for the purpose of developing better understanding among the different ethnic groups in the school district. One student output measure, Attitude Toward Differing Others, provided them with data they used to develop objectives for their program. A third had been making changes in many of their schools but had not introduced any program specific to their elementary level. One of their elementary schools scored poorly on several of the measures. Given the output results together with the input measures provided by BEQA and their own knowledge of the school, they brought in student teachers for all of their classes in order to enhance pupil-adult encounters. The fourth used the data as an accountability measure and as a guide for revising their social studies curriculum; they compiled their results into a district report and presented the findings to their school board.

As mentioned above, one of the no-change districts said they had used the materials for social studies curriculum revision and a guidance handbook. In the second no-change district, the superintendent questioned the validity of the measures used for eleventh grade where there were many low student output scores. The superintendent interviewed did not question the fifth grade instruments; the fifth grade scores were mostly average or above. This superintendent had experienced severe pressure from the community for him to resign. During his tenure, one-room schools were phased out and replaced by consolidated elementary schools and a middle school. In addition taxes had been raised. These events have not made the superintendent a popular figure, and revelation of low student output scores would probably increase the existing friction in the district. At any rate, he was not letting the reports out of his office. In the third no-change district the superintendent said they did not use the reports due to "large amounts of missing data." The investigator checked through the bureau files and found that only three basic skills subscale scores were missing.

This means nine student output scores were provided for each of the schools as well as all condition variable information. This superintendent also said the interpretation of the results was not clear. When the investigator offered to interpret the reports, the reports could not be found.

Both the second and third no-change districts serve predominantly rural areas. Both superintendents operate with almost no central administrative staff and neither man invited anyone else to the interview. The third district was making changes due to the construction of a new building; the second said his district was "very deliberate" when considering change.

On the basis of the interviews, it appeared to this investigator that assessment data are used by districts to either legitimate changes under consideration or to provide direction for new programs. It is more likely to be used in districts where the superintendent has a staff to which he delegates substantial responsibility. The data are not likely to be used if the district was not considering some kind of change or if the superintendent feels threatened by the results or fails to take an active interest in them.

#### DISCUSSION

The finding that as superintendents' perceived relevance of assessment results increase the use of those results is likely to increase was far from startling. However this finding takes on added importance when considered with the other findings of the study.

The desire of any assessment program is to have the target audience use the results. Considering that large scale assessment programs are usually initiated by state legislation or by large foundations, as in the case of National Assessment, it is important that the potential consumers see the need

for such programs. Since superintendents perceive Pennsylvania's assessment results as being very relevant to curriculum changes, the assessment results are apparently meeting some of the needs of the target audiences.

As has been shown, the use of information was not significantly related to the identification of a problem area, although the correlation was positive and in the predicted direction. The question asked if a problem not previously noted by the superintendent or his staff was identified. Several superintendents wrote they were aware of the problems identified by the assessment results; the assessment served to support their beliefs. Superintendents who were previously aware of problems identified by the assessment responded "no" to the item, but they had an added stimulus to make changes since, not only did they feel a problem existed, but an outside agency had confirmed their belief.

Superintendents who answered the problem area item "yes," but did not make changes could have taken one of several positions. They may have desired further confirmation of the existence of the problem; almost fifty-three percent of the superintendents thought in-depth study should be completed by the local district in order to realize any real value from the assessment results. Also, thirty-one percent of the superintendents said they needed more time to apply the results. In addition to these reasons, it may have been that the problem areas identified were low priority areas or areas where costs did not justify changes. It may also have been that the superintendents did not know what steps to take to solve the problem identified.

Another factor to consider with respect to the identification of problem area is the restricted dissemination of the results. Generally, only the school staff were informed of the results. The results were not "visible" to the general public or school pressure groups. Changes in school programs are often made as a result of outside pressure group influence. In this situation,

however, only the superintendent and his staff would be cognizant of the problems identified. Therefore, little, if any, outside pressure would have been applied on the school staff from knowledge of problems identified in the School Report.

From the data gathered in this study, it can be concluded that career-bound and place-bound superintendents do not differ in their use of assessment results. Career-bound superintendents have been identified as promoters of change while place-bound superintendents are said to maintain the organization. However, Carlson (1972, p. 133) has reported that most of the changes made by career-bound superintendents come in the initial years of their tenure. In this study, career-bound superintendents had spent an average of 8.20 years in their respective districts. The fact that most career-bound superintendents were not in their initial years as superintendents together with the fact that both they and their place-bound colleagues volunteered for assessment may be reasons behind their similar approaches to using the assessment results.

As previously noted, this study dealt with information usage and not with adoption of innovations. All superintendents were provided the information; they did not need to rely on outside contacts to obtain their information. Therefore, the first stage of the change process, awareness, was the same for all superintendents. Hence, the wide range of contacts, which provide many career-bound superintendents with knowledge about innovations, would be obviated by the process of information feedback to superintendents.

Past loyalties and identification with the system have been given as reasons for the reluctance of place-bound superintendents to initiate changes. Place-bound superintendents could use the assessment results as the reason for making changes. They could point to an outside agency, the Pennsylvania Department of Education, as the agent causing the need for change. Responsibility

for the consequences of the change, should the consequences be negative, would be mitigated, since the superintendent would not be held wholly responsible for the changes.

The dissemination of assessment results was, for the most part, restricted to inside audiences of the local school district regardless of the favorability of the results. This finding is in line with the historical reluctance of schools to publish test results. If assessment results are to be used to effect changes, it appears that some impetus must be given to superintendents to disseminate the results more widely. The finding that favorable results are not disseminated more widely than less favorable results may indicate the difficulty of translating assessment results to different audiences. Obviously, if results are going to be used in schools, knowledge of those results must be disseminated more widely.

The prediction of use of information was statistically significant, but only 11.7 percent of the variance was explained by the independent variables. The model hypothesized that variables representing superintendent and school district characteristics and perceptions of the school report would account for substantial amounts of the variance in use of information scores. Although variables from each category were represented in the final equation, their explanatory power remained small. These results require a reexamination of the variables used to represent the superintendent, school district and perception of the report and the exploration of other categories which might aid in the explanation of use of assessment results.

In the interviews, the "extensive-use" superintendents indicated they had initiated several innovative programs during their tenure; "non-use" superintendents indicated a "wait and see" attitude. The conclusion drawn by the investigator was that the "extensive use" superintendents were looking for ways

to make changes in their districts and the assessment results provided a vehicle for doing this; "non-use" superintendents, however, restricted the application of results because the results did not conform to their expectations. The assessment results served as a catalyst for many districts, a means of legitimizing previously contemplated changes.

This study was an attempt to ascertain the use made of assessment results by the target audience. Many words have been written about what target audiences could or should do with assessment results, but there is a dearth of information about what is actually done with such results. This study provided some insights to how school districts "handle" assessment information; these districts were not subjected to any pressures to use the information. Wynne (1972, p. 281) has written that information is the only important product of research and that nothing important happens differently in a society unless members of society are told something they had not realized before. Wynne states that new information does not automatically produce change but is a precondition to change. Through the Pennsylvania assessment program, vast amounts of information have been provided to school superintendents; but much of this information has not been communicated to targeted audiences. Assessment planners need to find ways to stimulate and assist school districts in achieving better dissemination of assessment results.

Assessment planners should consider the establishment of post-assessment units which could serve as resource agents, assisting target audiences in post-assessment activities. Such units could be established along the lines suggested by Havelock (1970). If assessment programs are to achieve the goals their originators have set for them, then integral to the assessment program must be mechanisms for assisting the target group in the application of results.

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NAME \_\_\_\_\_

DISTRICT \_\_\_\_\_

Bureau of Educational Quality Assessment (BEQA)

Follow-Up Questionnaire to Superintendent

1. Besides you, did other persons have an influence on your decision to participate in the assessment? For example:

\*26 a) board member(s)  
66 b) principals  
30 c) assistant superintendents  
31 d) supervisor (elementary/secondary)  
39 e) guidance personnel  
16 f) teacher(s)  
5 g) other district superintendents  
3 h) other (please note position)

2. What persons or groups, in addition to those attending the interpreting session have seen or heard (formally) the results the assessment program?

53 a) school board  
77 b) principals  
58 c) teachers: elementary  
41 d) teachers: secondary  
0 e) local service club (Lions, JayCees, etc.)  
16 f) PTA, PT0, any parent organization  
5 g) students  
8 h) other \_\_\_\_\_  
3 i) none

3. Have any of the results been published by the local media? yes 10  
no 83

4. What type of methods have been used to inform others about the BEQA report?

8 a) curriculum bulletin  
25 b) faculty memorandum  
19 c) school district newsletter  
17 d) special written report  
3 e) special media (slides, transparencies, etc.) presentation  
50 f) regular meetings with \_\_\_\_\_  
3 g) other \_\_\_\_\_  
10 h) none

\*Frequencies

5. Which of the following describe the use made of the BEAQ information? Check as many as appropriate.

2 a) The information has not been used as yet.  
85 b) The information has been the subject of some administrative and supervisory meetings.  
16 c) A new program is being planned for one of our schools as a result of the information.  
48 d) Revisions of some existing programs are underway as a result of the information.  
45 e) The information served as a basis for teacher in-service activities.  
4 f) A new program has been "tried out" in one of our schools as a result of the information.  
6 g) A new program has been incorporated into one school program as a result of the information.  
10 h) A new program has been incorporated into several of our schools as a result of the information.

6. If, in item 5, you marked (a) or (b) would you please check the statement(s) below which best describe the situation in your district?

4 a) The interpreting team was not thorough enough in their explanation of the report.  
12 b) The information was not sufficiently credible to merit use.  
12 c) The results reflect favorably on our present programs, hence no change was deemed necessary.  
29 d) District personnel have not had enough time to put the information to use.  
2 e) The results were interesting but not really applicable to our problems.  
49 f) In-depth study must be initiated and completed by the local district if any real value is to be derived from these findings.  
14 g) other (please describe)

7. If, in item 5, you marked either (c), (d), (f), (g) or (h) would you briefly describe the areas where you have made or are contemplating making changes based on BEQA information?

8. Would you indicate how you rate the goals in relation to your school district's programs?

	Very Important	Quite Important	Somewhat Important	Not Important
I Self Concept	63	28	2	—
II Understanding Others	54	31	8	—
III Basic Skills	61	29	3	—
IV Attitude Toward School	51	34	8	—
V Citizenship	55	34	4	—
VI Health Attitudes	41	38	14	—
VII Creativity	50	34	9	—
VIII Work Attitudes	49	36	8	—
IX Appreciation of Human Achievement	47	36	10	—
X Preparing for a Changing World	54	26	13	—

9. In what way(s) is the information provided in the report relevant to decisions which must be made by you as the superintendent?

	Very Relevant	Quite Relevant	Relevant	Not Relevant
Relevant to:				
a) curriculum changes	53	27	12	1
b) personnel assignments	17	40	25	10
c) financial allocations	20	35	27	10
d) school plant planning	10	26	38	18
e) other	—	—	—	—
f) not relevant	—	—	—	—

10. Did the information provided call your attention to a problem area not previously noted by you or your staff? yes 48 no 45

11. If, in item 10, you answered yes, would you briefly describe the problem area? (Goal scores, condition variables, etc.)

12. Please indicate the degree of value you attach to the following parts of the report.

	Of great value	Some value	Little value	Of no value
a) goal scores	40	48	5	
b) predictions	31	54	8	
c) condition variables	27	55	10	1
d) key item data	24	54	13	2
e) student distribution	30	50	9	4
f) other				

13. What aspects of the program would you change?

21 a) assessment instrument  
40 b) reporting procedures  
28 c) testing conditions  
4 d) goals  
6 e) other  
26 f) none

14. How do you consider the BEQA program as compared with other PDE programs?

19 a) much more useful  
28 b) more useful  
36 c) useful  
3 d) less useful  
0 e) much less useful  
7 f) very similar

15. Would you list the position of the person(s) who has spent the most time with the BEQA report?

POSITION

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16. How many years (not including school year 71-72) have you been the chief school administrator of this district? \_\_\_\_\_

17. Why did you decide to become involved in assessment for your district?

18. Please add any comments you wish regarding the assessment program. BEQA welcomes any constructive criticisms you may have. You may, for example, wish to elaborate on your response to item 13.